

PUBLIC WORKS & UTILITIES COMMITTEE

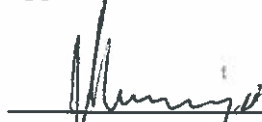
13-0100R

RESOLUTION AUTHORIZING A CONTRACT WITH LHB, INC. FOR PROFESSIONAL ENGINEERING SERVICES FOR THE DESIGN FOR FLOOD REPAIR OF BRIDGE NO. L6115 AND ADJACENT RETAINING WALLS, SKYLINE PARKWAY AT CHESTER CREEK, IN THE AMOUNT OF \$88,240.

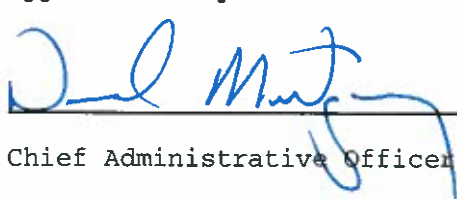
CITY PROPOSAL:

RESOLVED, that the proper city officials are hereby authorized to enter into an agreement with LHB, Inc. For professional engineering services related to the design of flood repair of Bridge No. L6115 and its adjacent retaining walls, Skyline Parkway at Chester Creek, in an amount not to exceed \$88,240, payable from Disaster Recovery Fund 225, Department/Agency 125 (Finance), Organization 1803 (Roads and Bridges), Object 5303 (Engineering Services), city project no. 1177, S.P. 118-179-004, requisition no. 13-0183.

Approved:

  
Department Director

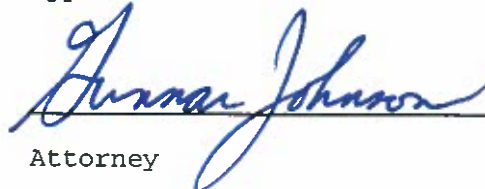
Approved for presentation to council:

  
Chief Administrative Officer

Purchasing Agent



Approved as to form:

  
Attorney

Approved:

  
Auditor

ENG PTM:jh 2/14/2013

STATEMENT OF PURPOSE: This resolution will authorize a contract for professional

engineering services for the design of flood repair of Bridge No. L6115, Skyline Parkway at Chester Creek. Costs to be reimbursed by state of Minnesota disaster funding. Disaster Recovery Fund 225, Department/Agency 125 (Finance), Organization 1803 (Roads and Bridges), Object 5303 (Engineering Services), city project no. 1177, S.P. 118-179-004, FEMA flood site no. 539, requisition no. 13-0183.





21 West Superior Street, Suite 500  
Duluth, Minnesota 55802  
218 727-8446  
Fax 218 727-8456  
www.LHBcorp.com

February 12, 2013

Patrick Mlakar  
City Engineering  
211 City Hall  
Duluth, MN 55802

**SKYLINE PARKWAY RETAINING WALLS AT BRIDGE L6115  
JUNE 2012, FLOOD REPAIRS  
SCOPING, PRELIMINARY AND FINAL DESIGN  
WORKSCOPE AND PROPOSAL**

Enclosed please find our work task and financial proposal for the above defined project. We have prepared our proposal to include the following workscope, which as we understand the project today should be the necessary workscope to bring the project from concept phase through bidding.

Task 1; Project Development- Gather existing information concerning the project; prepare funding submittals; and meetings and correspondence as required through the design of the project.

Task 2: Investigative Phase- Initial field/ site investigation, topographic site survey of the roadway, slopes and existing retaining wall features; coordination and hiring of geotechnical work scope; MnDNR permitting; consultation with MnDOT Cultural Resources Office and State Historic Preservation Office; and Federal ER Report preparation.

Task 3: Preliminary Design Phase- Preparation of preliminary layout and geometric plans for the project. The project has been broken into two regions- the Easterly Site (east of Bridge L6115) where extension of the existing concrete retaining wall is anticipated to be the solution to stabilize the slope; and the Westerly Site (West of Bridge L6115) where it is anticipated the in place large dry stack stone retaining wall will be required to be completely disassembled due its currently precarious condition with numerous stones displaced and/ or missing. For reconstruction of the wall and in order to maintain the walls unique dry stack properties while meeting design code requirements it is anticipated a cantilever concrete backing retaining wall will first be built and the dry stack wall then reconstructed in front of the new concrete retaining wall with associated connections and interface materials between the two.

Task 4: Final Design/ Plans- Preparation of final design plans for the project. Plans will be prepared in accordance with City of Duluth, MnDOT and Federal plan requirements and will be submitted through MnDOT to include review, corrections and approval.

Duluth, MN

Minneapolis, MN

Task 5: Project Coordination- Preparation of construction cost estimates through the design phase and preparation of bid special provisions.

We appreciate the opportunity to prepare this proposal and assist the City with this project. Upon review if you have any questions please do not hesitate to call.

LHB

A handwritten signature in black ink, appearing to read "Joseph D. Litman". The signature is fluid and cursive, with the first name "Joseph" being more prominent.

JOSEPH D. LITMAN PE, PROJECT MANAGER



### LHB Labor Summary

### Skyline Parkway Retaining Walls at Bridge L6115

City of Duluth  
JDL

Project Breakdown - Task Description		P1	P5	P8	P11	P13	T3	T8	A1	Total Labor Costs (\$)	
		Project Principal	Project / Disc. Mgr.	Project Eng.	Eng. XI	Eng. XIII	Sr. Tech Designer	Intermed. Designer	Admin. Assist.		
		\$149	\$135	\$105	\$88	\$70	\$89	\$63	\$65		
Task 1 - Project Development											
Gather Information/ Funding Submittals			2.00		2.00		2.00				
Meetings/ Correspondence (City, State)			4.00	4.00	6.00					\$624	
										\$1,488	
Task 2 - Investigative Phase										\$0	
Initial Field Investigation			2.00	2.00			2.00			\$0	
Site Survey/ Topo- Easterly Concrete Wall Site				2.00			2.00	7.00		\$658	
Site Survey/ Topo- Westerly Stone Wall Site				2.00			12.00	12.00		\$1,274	
Coord. With Geotech				2.00						\$2,034	
MnDNR Permitting			1.00	4.00			1.00			\$210	
Consultation w/ Cultural Res./ SHPO			4.00	8.00			4.00			\$644	
Fed ER Reporting			4.00	10.00			6.00			\$1,736	
										\$2,124	
Task 3 - Preliminary Design Phase										\$0	
Easterly Site										\$0	
Preliminary Construction Plan			2.00	4.00			6.00			\$0	
Preliminary Retaining Wall Geometrics			2.00	4.00			6.00			\$1,224	
Westerly Site										\$1,224	
Site Reconst. Extents Assessment			2.00	4.00			4.00			\$0	
Reconst. Options Study			2.00	4.00			4.00			\$1,046	
Preliminary Reconst Plan			1.00	4.00			8.00			\$1,046	
Preliminary Reconst Details			1.00	4.00			8.00			\$1,267	
										\$1,267	
Task 4 - Final Design/ Plans										\$0	
Title Sheet & Index Map				1.00	2.00		4.00			\$0	
Statement of Estimated Quantities/ Notes			2.00	2.00	6.00		12.00			\$637	
Typical Section, Earthwork Summary			1.00	2.00	2.00		8.00			\$2,076	
Roadway Construction Details				2.00			8.00			\$1,233	
Erosion Control Details (2 Shfts.)				2.00			8.00			\$922	
SWPPP				1.00			4.00			\$744	
Traffic Control Plan (2 Shfts)				2.00			6.00			\$461	
Easterly Site										\$744	
Erosion Control Plan			1.00	2.00			6.00			\$0	
Construction Plan and Profile			1.00	4.00			14.00			\$879	
Wall Developed Elevation			1.00	4.00	12.00		16.00			\$1,801	
Wall Data			1.00	4.00	12.00		8.00			\$3,035	
Wall Sids (5 Shfts.)				1.00	6.00		8.00			\$2,323	
Wall Railing Details (2 Shfts.)				2.00	12.00		20.00			\$1,345	
Wall Earthwork Cross Sections (3 shfts)				2.00	6.00		14.00			\$3,046	
										\$1,984	
Westerly Site										\$0	
Erosion Control Plan			1.00	2.00			10.00			\$0	
Construction Plan and Profile			2.00	8.00			18.00			\$1,235	
Stone Wall Removal Plan			2.00	6.00	2.00		16.00			\$2,502	
Wall Foundation/ Footing Plan (2 Shfts)			2.00	6.00	10.00		20.00			\$2,500	
Wall Foundation/ Footing Reinforcing (2 Shfts.)			2.00	6.00	10.00		24.00			\$3,560	
Wall Foundation/ Footing Details			2.00	8.00	8.00		16.00			\$3,916	
Wall Elevation/ Reinforcing (2 Shfts.)			4.00	8.00	12.00		32.00			\$3,028	
Concrete Wall Sections			1.00	6.00	8.00		16.00			\$5,284	
Concrete Wall Details			2.00	8.00	12.00		16.00			\$2,893	
Stone Facing Setting Elevation			1.00	6.00			20.00			\$3,590	
Stone Facing Details (2 Shfts)			2.00	8.00			24.00			\$2,545	
Wall Earthwork Cross Sections (4 Shfts)				2.00	6.00		16.00			\$3,246	
										\$2,182	
Task 5 - Project Coordination										\$0	
Construction Cost Estimating			6.00	4.00	4.00		4.00			\$0	
Special Provisions			6.00	12.00						\$1,938	
										\$2,070	
Total Hours		0	67	175	138	0	436	19	0		
Travel	Miles	# Trips	Rate	Cost	Direct Costs		Cost	Labor		\$79,565	
					Survey Equip		\$300	Travel Costs		\$0	
					Geotech. (Braun)		\$8,375	Direct Costs		\$8,675	
Total Travel Costs				\$0	Total Direct		\$8,675				
Total Not To Exceed Cost										\$88,240	

**COST ESTIMATE**

DU-13-00690

**Skyline Pkwy - Chester Creek Retaining Walls**LHB, Inc.  
Joseph Litman21 West Superior Street, Suite 500  
Duluth, MN 55802-3006**Service Desc: Geotechnical Evaluation****Work Location: Skyline Parkway**  
Duluth, MN**Estimator : Joseph C Butler**

Description:	Quantity:	Units:	Unit Price:	Extension:
<b>Phase:Geotechnical Evaluation</b>				
Start Date: 3/7/2013	End Date:4/7/2013			
<b>Task: Drilling Services</b>				
Flaggers	30.00	Hours	55.00	1,650.00
Truck-or skid mounted drill rig, per hour	15.00	Hours	215.00	3,225.00
Warning signed, billed at cost plus 15%	1.00	Each	300.00	300.00
NQ Diamond coring bit wear, per foot	10.00	Feet	15.00	150.00
Bore hole abandonment materials, per foot	135.00	Feet	1.50	202.50
Mobilization	1.00	Each	650.00	650.00
Daily Mobilization & Support Vehicles	2.00 Days		325.00	
<b>Drilling Services Total:</b>				<b>6,177.50</b>
<b>Task: Staking and Utility Clearance</b>				
Site layout and utility clearance	2.00	Hours	100.00	200.00
<b>Staking and Utility Clearance Total:</b>				<b>200.00</b>
<b>Task: Engineering Consulting Services</b>				
Project Engineer	10.00	Hours	140.00	1,400.00
Senior Engineer	1.50	Hours	155.00	232.50
Project Assistant	3.00	Hours	75.00	225.00
Soil Boring location sketch(to scale)	1.00	Each	140.00	140.00
<b>Engineering Consulting Services Total:</b>				<b>1,997.50</b>
<b>Geotechnical Evaluation Total:</b>				<b>8,375.00</b>
<b>Project Total:</b>				<b>8,375.00</b>